which of wireless mobile clients **108** are to participate in the display of one or more

luminescent crowd patterns, and which picture elements are to be displayed by each of

the participating ones of wireless mobile clients **108**. In one embodiment,

communication server **300** determines which constituent luminescent pattern(s) of the

5   larger crowd pattern are to be transmitted to the participating ones of wireless mobile

clients **108**. Such a determination may be made e.g. based upon the relative location of

the participating wireless mobile clients **108** as determined with respect to the location

of other wireless mobile clients, or with respect to a fixed location within a given venue.

In another embodiment, communication server **300** may transmit an entire crowd

10   pattern to one or more wireless mobile clients leaving the responsibility of luminescent

pattern selection up to the individual wireless mobile client. By doing so,

communication server is freed from the processing requirements associated with

determining which one or more constituent luminescent pattern(s) are to be displayed

by a given wireless mobile client.

15   Registration services **305** are responsible for identifying which one or more

wireless mobile clients are to participate in the luminescent display of one or more

crowd patterns, and to store identifiers for each such participating wireless mobile client

in e.g. visualization configuration records **310**. In accordance with one embodiment of

the invention, visualization agent **304** provides interactive voice response services,

20   which may be responsive to voice and/or DTMF tones supplied by users of wireless

mobile clients. In such an embodiment, users of wireless mobile clients **108** may call a

generic dial number associated with communication server **300** to register himself or

herself as participating in the display of one or more crowd patterns. User registration

may be accomplished e.g. by the user reacting to voice prompts guiding the user

through a call tree until an appropriate selection has been made. For example, a user

may be able to enter an event code (e.g. '126') representing the related event (and by

association, the venue), which is then associated with a user-specific identifier. In one

5   embodiment, the user-specific identifier is the dial number associated with the user's

wireless mobile client, which may be obtained through e.g. a dialed number

identification service (DNIS). In other embodiments, users of wireless mobile clients

108 may register as participating in the display of one or more crowd patterns via one or

more packet-based wireless technologies such as the web access protocol (WAP)

10   messages, as well as through short message service (SMS) messages, for example.

Once the user has been identified to communication server **300**, the user may

continue by providing the user's location to communication server **300**. For example,

the user may provide their respective venue seating information (i.e. section number,

row number, seat number and so forth) to communication server **300**, which is further

15   stored in visualization configuration records **310** in association with the user-specific

identifier. In other embodiments, users' locations may be determined by positional

systems such as GPS that are based on triangulation. However, location information

will be only as accurate as is allowed by the particular positional system based upon

technological limitations as well as any artificial accuracy limitations that may be

20   imposed by a group such as e.g. the Government or military. In an alternative

embodiment, rather than calling a generic dial number to register as a participating user,

users may call an event-specific dial number pre-associated with a particular event

and/or venue. Accordingly, the user may not be required to provide an event and/or venue specific code when registering with communication server **300**.

In certain embodiments, the communication session established between a wireless mobile client and communication server **300** is terminated once the user has

5   registered their identity (and perhaps location) with the communication server, and the appropriate one or more luminescent patterns have been received by the wireless mobile client from the communication server. In other embodiments, the communication session established between a wireless mobile client and communication server **300** is sustained for a longer duration. In one embodiment, the

10   communication sessions between communication server **300** and wireless mobile clients **108** may be sustained for an extended duration such that communication server **300** may periodically transmit new patterns or sequences to the crowd. For example, communication server **300** may transmit a single pattern every 1/10 of a second in order to maintain synchronization between wireless mobile clients **108** and communication

15   server **300**. In other embodiments, the communication sessions between communication server **300** and wireless mobile clients **108** may be sustained for an extended duration to allow for further interaction (i.e. feedback) between the user and the communication server. More specifically, participating (i.e. registered) users within a given venue may be verbally solicited with a question that is posed to the crowd via

20   the public address system or through the one or more wireless mobile clients. In response, the communication server may then transmit one or more luminescent patterns to the responding wireless mobile clients based upon the users' respective responses to the questions. For example, spectators at a sporting event may be asked